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10/06/2008

KRATZ, QUINTOS & HANSON, LLP 1420 K Street, N.W. Suite 400 WASHINGTON, DC 20005 EXAMINER

NGUYEN, HOANG M

ART UNIT

PAPER NUMBER

3748

DATE MAILED: 10/06/2008

| ĺ | APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-----------------|-------------|----------------------|---------------------|------------------|
| • | 10/553,237      | 01/11/2007  | Masayoshi Mori       | 050649              | 1092             |

NOTICE OF ALLOWANCE AND FEE(S) DUE

TITLE OF INVENTION: MULTISTAGE STIRLING ENGINE

| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO           | \$1510        | \$300               | \$0                  | \$1810           | 01/06/2009 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

## HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

## PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

| maintenance fee notifications.  CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)  23850 7590 10/06/2008  KRATZ, QUINTOS & HANSON, LLP 1420 K Street, N.W. Suite 400 |  |  | F<br>D   | ee(s) Transmittal. Thi<br>opers. Each additiona  | s certificate cannot be used  | or domestic mailings of the<br>for any other accompanying<br>ent or formal drawing, must  |
|---|--|--|--|--|---|---|
|   |  |  |  | Cer  | smission<br>g deposited with the United<br>st class mail in an envelope<br>above, or being facsimile<br>late indicated below.                         |   |
| WASHINGTON  | N, DC 20005  |  |  |  |   | (Depositor's name)  |
|   |  |  |  |  |   | (Signature)   |
|   |  |  |  |  |   | (Date)  |
| APPLICATION NO.   | FILING DATE  |  | FIRST NAMED INVENTO  | )R   | ATTORNEY DOCKET NO.   | CONFIRMATION NO.  |
| 10/553,237  | 01/11/2007   |  | Masayoshi Mori   |  | 050649  | 1092  |
| TITLE OF INVENTION  | . Mollistadi siiki   | and Eveling  |  |  |   |   |
| APPLN. TYPE   | SMALL ENTITY   | ISSUE FEE DUE  | PUBLICATION FEE DU   | E PREV. PAID ISSUE   | E FEE TOTAL FEE(S) DUE  | E DATE DUE  |
| nonprovisional  | NO   | \$1510   | \$300  | \$0  | \$1810  | 01/06/2009  |
| EXAM  | IINER  | ART UNIT   | CLASS-SUBCLASS   |  |   |   |
| NGUYEN,   | HOANG M  | 3748   | 060-517000   |  |   |   |
| "Fee Address" ind<br>PTO/SB/47; Rev 03-0<br>Number is required.  3. ASSIGNEE NAME A   | ND RESIDENCE DATA<br>less an assignee is ident<br>h in 37 CFR 3.11. Com  | " Indication form<br>led. Use of a Customer<br>A TO BE PRINTED ON  | or agents OR, altern (2) the name of a single registered attorney of 2 registered patent a listed, no name will  THE PATENT (print or  | gle firm (having as a r agent) and the nam-<br>torneys or agents. If the printed.  Type)  patent. If an assignment.      | member a 2es of up to no name is 3ee is identified below, the of  | document has been filed for   |
| Please check the appropr  | iate assignee category or  | categories (will not be p  | orinted on the patent):  | Individual Co  | rporation or other private gr   | oup entity 🗖 Government   |
| 4a. The following fee(s) are submitted:  ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies   |  |  | A check is enclosed Payment by credit  | l.<br>eard. Form PTO-2038  | y <b>previously paid issue fee</b> is attached. ge the required fee(s), any der(enclose :   |   |
|   | s SMALL ENTITY state   | as. See 37 CFR 1.27.   |  |  | L ENTITY status. See 37 C   | CFR 1.27(g)(2).   |
| interest as shown by the  | records of the United Sta  | tes Patent and Trademark   | k Office.  | apprount, a regr   | or agent, or a  | and anonghee of other party in  |
| Authorized Signature  |  |  |  | Date   |   |   |
| Typed or printed name   |  |  |  | -  | o   |   |
| This collection of inform<br>an application. Confiden<br>submitting the complete<br>this form and/or suggest<br>Box 1450, Alexandria, V<br>Alexandria, Virginia 223                             | nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this bu /irginia 22313-1450. DC 113-1450. | EFR 1.311. The informati<br>U.S.C. 122 and 37 CFR<br>USPTO. Time will vary<br>rden, should be sent to tf<br>O NOT SEND FEES OR | on is required to obtain on the collection is the collection is the collection is the collection of the collection of the completed for the collection is considered for the collection in the collection is considered for the collection in the collection is collected for the collection in the collection in the collection is collected for the collection in the collection in the collection is collected for the collection in the collection in the collection is collected for the collection in the collection in the collection is collected for the collection in the collection in the collection is collected for the collection in the collection | r retain a benefit by the<br>estimated to take 12 r<br>lividual case. Any co<br>icer, U.S. Patent and<br>TO THIS ADDRESS | ne public which is to file (an<br>minutes to complete, includi<br>mments on the amount of ti<br>Frademark Office, U.S. Dep<br>. SEND TO: Commissioner | nd by the USPTO to process)<br>ng gathering, preparing, and<br>ime you require to complete<br>partment of Commerce, P.O.<br>for Patents, P.O. Box 1450, |

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|-----------------------------|-----------------|----------------------|--------------------------------|------------------|--|
| 10/553,237 01/11/2007       |                 | Masayoshi Mori       | 050649 1092                    |                  |  |
| 23850 7590 10/06/2008       |                 |                      | EXAMINER                       |                  |  |
| KRATZ, QUINT                | OS & HANSON, LI | NGUYEN, HOANG M      |                                |                  |  |
| 1420 K Street, N.V          | V.              | ART UNIT             | PAPER NUMBER                   |                  |  |
| Suite 400<br>WASHINGTON, I  | OC 20005        |                      | 3748<br>DATE MAILED: 10/06/200 | 8                |  |

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 71 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 71 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

|  | Application No.  | Applicant(s)  |  |  |  |
|--|--|---|--|--|--|
| Notice of Allowability   | 10/553,237   | MORI, MASAYOSHI   |  |  |  |
| Notice of Allowability   | Examiner   | Art Unit  |  |  |  |
|  | Hoang M. Nguyen  | 3748  |  |  |  |
| The MAILING DATE of this communication appeal claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313 | (OR REMAINS) CLOSED in this app<br>or other appropriate communication<br>IGHTS. This application is subject to | olication. If not included will be mailed in due course. THIS |  |  |  |
| 1. This communication is responsive to <u>8/21/08</u> .  |  |   |  |  |  |
| 2. $\square$ The allowed claim(s) is/are <u>1-5,7 and 8</u> .  |  |   |  |  |  |
| <ul> <li>3.  Acknowledgment is made of a claim for foreign priority under a)  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have</li> </ul>   |  |   |  |  |  |
| <ol><li>Certified copies of the priority documents have</li></ol>  | been received in Application No  | ·   |  |  |  |
| <ol><li>Copies of the certified copies of the priority do</li></ol>  | cuments have been received in this r   | national stage application from the                           |  |  |  |
| International Bureau (PCT Rule 17.2(a)).   |  |   |  |  |  |
| * Certified copies not received:   |  |   |  |  |  |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  |  | complying with the requirements                               |  |  |  |
| 4. A SUBSTITUTE OATH OR DECLARATION must be subm<br>INFORMAL PATENT APPLICATION (PTO-152) which give   |  |   |  |  |  |
| 5. CORRECTED DRAWINGS ( as "replacement sheets") mus   | et be submitted.   |   |  |  |  |
| (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached   |  |   |  |  |  |
| 1) hereto or 2) to Paper No./Mail Date   |  |   |  |  |  |
| (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date   |  |   |  |  |  |
| ldentifying indicia such as the application number (see 37 CFR 1.<br>each sheet. Replacement sheet(s) should be labeled as such in t   |  |   |  |  |  |
| 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.  |  |   |  |  |  |
|  |  |   |  |  |  |
| Attachment(s) 1. ☐ Notice of References Cited (PTO-892)  | 5. ☐ Notice of Informal P  | atent Application   |  |  |  |
| <ol> <li>Notice of Preferences Gled (1 10-032)</li> <li>Notice of Draftperson's Patent Drawing Review (PTO-948)</li> </ol>   | 6. ☐ Interview Summary   | • •   |  |  |  |
| 2. Thouse of Brancherson's Faterit Brawning Neview (F10-540)   | Paper No./Mail Dat   |   |  |  |  |
| 3. Information Disclosure Statements (PTO/SB/08),  | 7. 🔲 Examiner's Amendn   | nent/Comment  |  |  |  |
| Paper No./Mail Date  4. Examiner's Comment Regarding Requirement for Deposit   | 8. 🔲 Examiner's Stateme  | ent of Reasons for Allowance                                  |  |  |  |
| of Biological Material   | 9.  ☐ Other .  |   |  |  |  |
| /Hoang M Nguyen/   | <u> </u>   |   |  |  |  |
| Primary Examiner, Art Unit 3748  |  |   |  |  |  |
|  |  |   |  |  |  |